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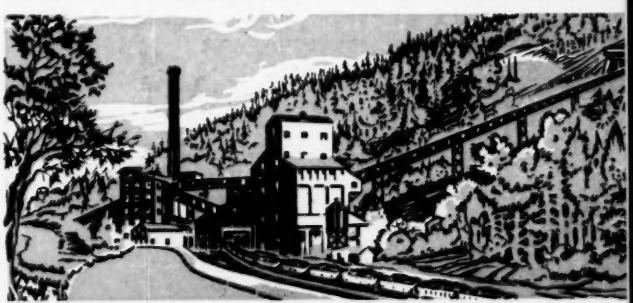

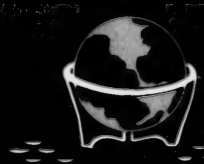

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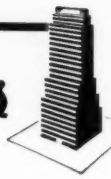

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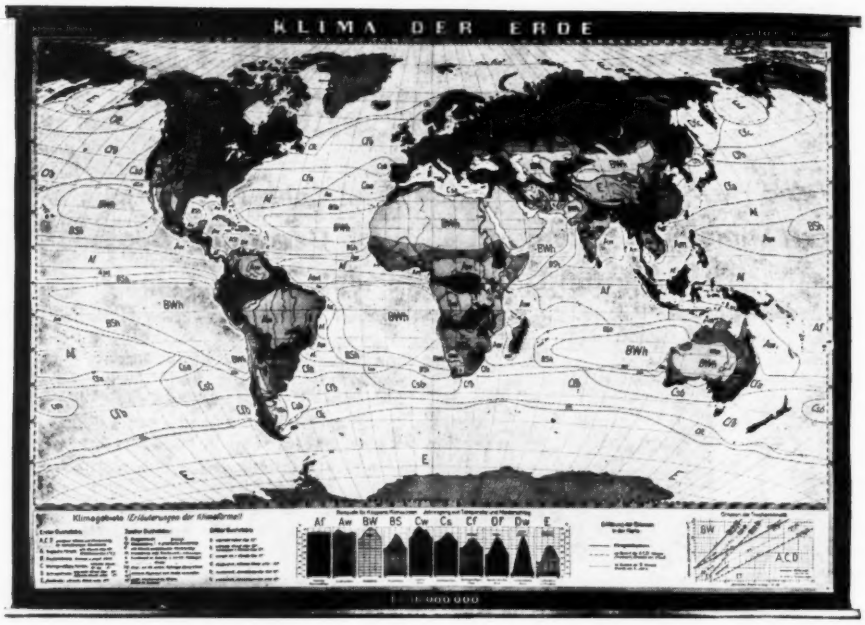


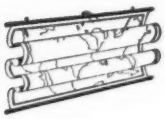
Size 84 x 60 inches. Scale 252 miles to inch. Winkel's modified projection. German text. Hand mounted on muslin.

This is an entirely new map incorporating data that has become available since the previous edition was published over 25 years ago. Even the projection has been changed. (The previous map was on a Mercator projection.)

Dr. Koppen's classification of world climates is based primarily on the annual and monthly means of temperature and precipitation. Varying shades of red, yellow, green and blue show the following major climatic patterns:

Tropical Rainy	Mediterranean
Savanna	Marine Humid Mesothermal
Desert	Short Summer Humid Microthermal
Steppe	Transbaikalian Subarctic
Tropical Monsoon	Tundra Ice-Cap

Dr. Koppen again has used the symbolic nomenclature for designating climatic types. This unique and distinctive feature enables the author to describe each type of climate by a formula. For example, an area in southeast United States is labelled Cfa indicating:—*C* warm temperature climate. *f* sufficient precipitation each month. *a* warmest month over 22 degrees centigrade.



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LAND REFORM IN EGYPT

EARL B. SHAW
State Teachers College, Worcester

Egypt (Fig. 1) is as large as France, Italy, England and Wales combined, (Fig. 2) 386,000 square miles; but all Egypt is desert except the Nile Valley, (Fig. 3) about 12,000 square miles, an area approximately the size of Massachusetts and Connecticut (Fig 4). On this Nile Valley the density of population is more than 1500 people for each section of land.

About three-fourths of the 20 million people, 15 million fellaheen, live with deplorable living standards on about six million acres of land (Table 1). This gives an average of about two or three acres of land to each family; but many families have less than one acre. An examination of statistics on land ownership will give a clearer picture of farm holdings in the Nile Delta; and it will aid in answering the first question on Egyptian land reform—why is

TABLE 1
DISTRIBUTION OF LAND OWNERSHIP IN 1947*

Size of Holdings in Feddans	Number of Land Owners	Per cent of Total Owners	Area Held in Feddans	Per Cent of Total Area
0–½	1,401,385	52.639	420,978	7.061
½–1	519,236	19.505	361,394	6.062
1–2	322,260	12.102	454,454	7.623
2–5	264,263	9.927	756,015	12.632
5–10	80,996	3.044	540,821	9.072
10–50	62,277	2.336	1,233,619	20.693
50–100	6,642	.250	448,725	7.527
100–600	4,645	.176	998,933	16.756
600–1500	411	.017	360,975	6.054
1500 plus	128	.004	385,733	6.470
Totals	2,662,243	100.	5,961,647	100.

* The source of the table is *The 1948 Annuaire Statistique* quoted by Paul V. Maris, consultant for the American Embassy in Cairo, Egypt.

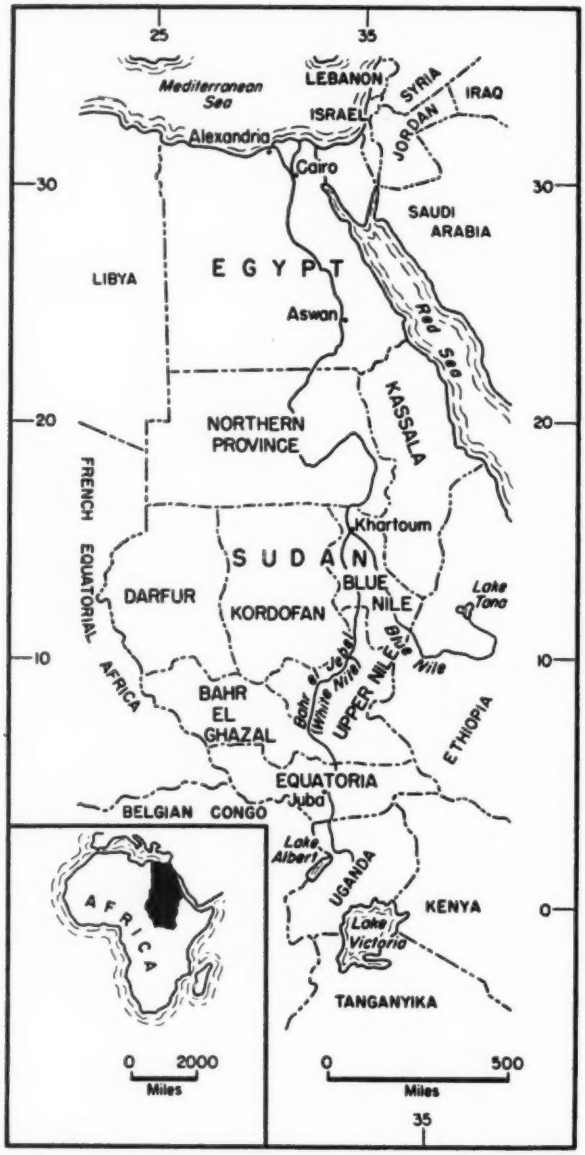

Fig. 1. The Nile Basin and Neighboring Territory.

land reform needed. Among the facts brought out by the statistical table the following are related to the preceding question:

1. Seventy-two per cent of the land holders own less than an acre each, and own but 13 per cent of the farm land (Fig. 5).
2. Nearly two million land owners own less than one acre of land each.
3. Landowners owning 10 acres or less own less than 50 per cent of the land; thus Egypt is *not* a country in which most of the land is held by small land owners.
4. Less than three per cent of the land owners (Fig. 5) own nearly 60 per cent of the land; less than one-half of one per cent of the land owners own over one-third of the land; about 500 land owners own nearly 1400 acres each or as much as the two million fellaheen owners.

Other facts related to the question may be added: 1. Since 1900 small and medium sized properties—under 10 acres—have not increased at the expense of large properties; rather the increase in area of approximately a million acres in the last 50 years has been a result of reclamation and bringing into cultivation new lands; these have been granted to the fellaheen by the state.

2. Families totaling over five million members make most of their living from share-cropping. Families totalling nearly five million members make most of their living as salaried workers. Thus nearly 75 per cent of the fellaheen are economically dependent upon the large land owners (Fig. 6); and peasant property has little weight in economic and social policy.

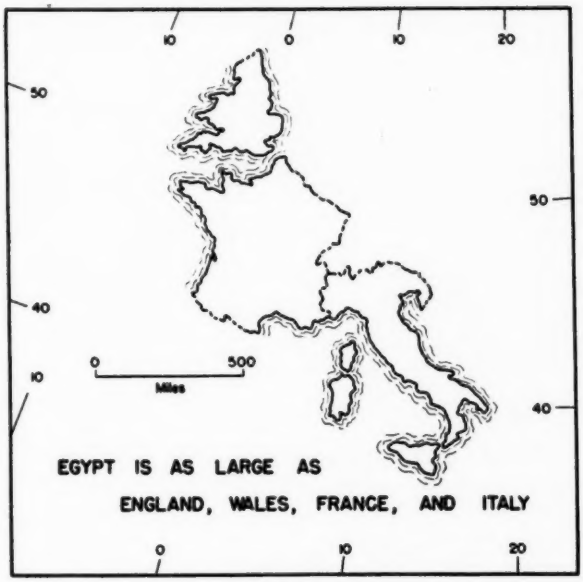

Fig. 2.

3. The large land owners had political and administrative power over the fellaheen almost feudal in character; the majority of the government deputies and senators were land owners elected by the fellaheen thru bribes and beatings.

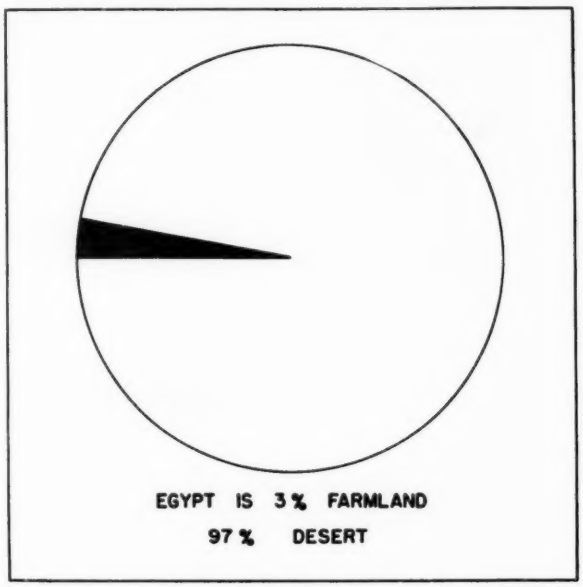

Fig. 3.

Prime Minister Lewa Mohamed Naguib released the following announcement after signing the land reform decree at 3:15 A.M., Tuesday, September 9, 1952. "The Council of Ministers has approved tonight a decree law on the agrarian reform and the relationships of land ownership. This concludes the scheme which some people regard as the first step toward rebuilding

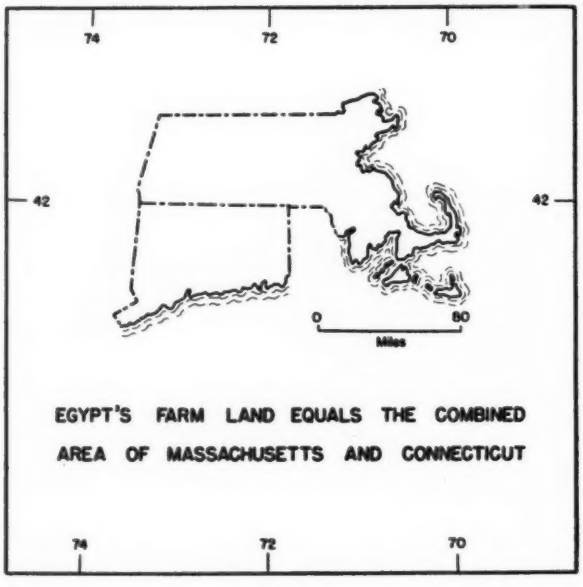

Fig. 4.

Egypt's economic and social structure."

What are the main features of the land reform law?

1. The law establishes the 200 feddan or acre limit (1 feddan equals 1.038 acres). Expropriating each year not less than ⅕ of the area subject to expropriation and starting with the largest estates, the job is to be finished within five years. Desert land to be reclaimed and sold, factory sites, and land held for benevolent purposes are excepted from the limitation.

2. Land owners are not obliged to wait for the state to act. They can within five years, and with the approval of the Summary Court having jurisdiction, transfer up to 100 feddans to their children, providing no child gets more than 50 feddans. They can also, subject to the same court approval, sell not to exceed five feddans each to owners of not more than ten feddans who are not relatives or who are relatives beyond the fourth degree.

3. Land owners are to be compensated for expropriated land at the rate of ten times the annual rent. (Annual rent is to be estimated at seven times the tax on the land.) The price of buildings, trees and machinery on the land is to be added to the land's selling price.

4. Expropriated land will be distributed to peasants in units varying in size according to quality, from a minimum of two feddans to a maximum of five feddans. Recipients must be Egyptians without criminal records who are cultivators by trade and who own less than five feddans. Such persons who are actually working on the expropriated land have

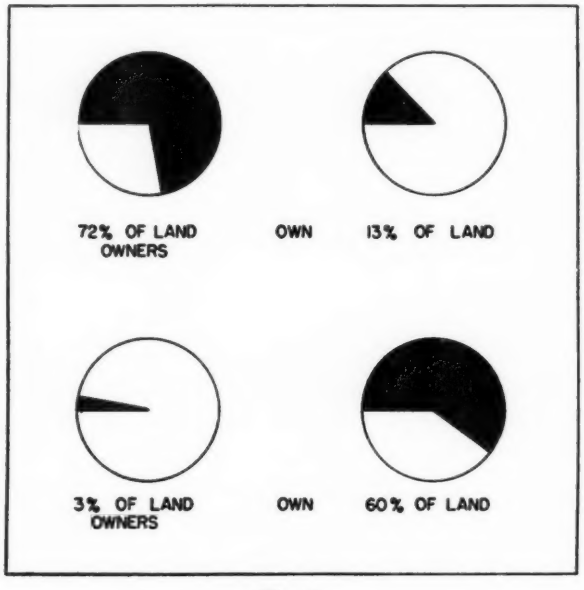

Fig. 5.

the first right to buy parts of it.

5. An exception to the five feddan upper limit on the distributed land is made in the case of orchards. They may be distributed in plots as large as twenty feddans.

6. Purchasers will be charged for the land at prices which it is estimated the farmers have received for it plus a three per cent annual interest charge. They will also pay 15 per cent of the price of the land to meet the cost of expropriating and distributing it. This charge is non-recurring. The total sum is to be paid in 30 annual installments.

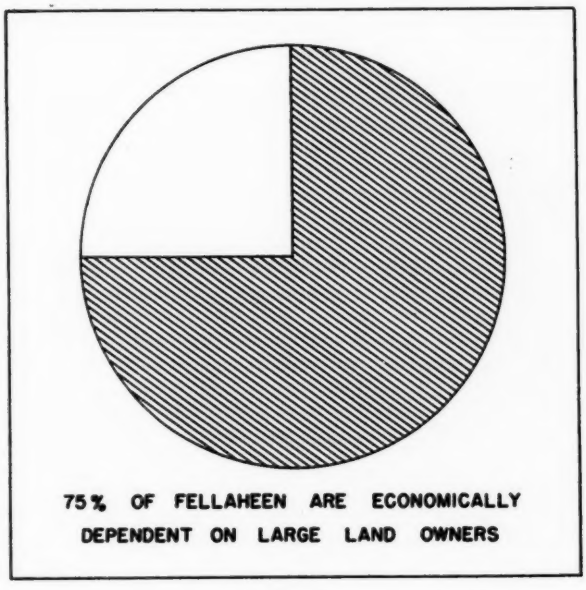

Fig. 6.

7. Wages of the agricultural workers in the different agricultural districts will be fixed every year by a committee appointed by the Minister of Agriculture. Agricultural workers can form unions to defend their common interests.

8. All fellaheen owning five feddans or less, whether they be purchasers of expropriated land or not, are, by force of law made members of an agricultural cooperative association. Ordinarily there will be one such cooperative for each village. Cooperative associations are to perform the following functions: a. issue agricultural loans to members according to needs of their lands; b. provide members with seeds, fertilizers, cattle, agricultural machinery and means of storage and transport; c. organize the tilling of land and exploit it in the most efficient manner; d. combat pests and dig canals and drainage ditches; e. sell main crops for the account of its members and deduct land payment installments, taxes, agricultural and other loans; f. render other agricultural and social services.

A question which arises immediately in any consideration of Egyptian land distribution is this: how much land will be available for distribution. Estimates range from a half a million to three-quarters of a million feddans, an amount that will satisfy too few of the land hungry fellaheen. This amount may be lowered by sale of land from large land owners who prefer to sacrifice on sale price rather than await expropriation. Such sales will obviously not be made to the poorest fellaheen, but to fellaheen who may already own ten feddans; under the law a peasant owning ten feddans may acquire another five, so that he would end up with a property which is not very small for Egyptian conditions; in addition, he can also

have one or two sons, his wife, his uncle, etc. buy five feddans each. He thus has a chance to set up a medium-sized farm, even tho in joint family ownership. Under such conditions, the land reform might create a notable number of medium-sized farms which are owned either by well-to-do peasants or by an urban middle class.

From a purely economic point of view, there could be little objection to such a development. In fact, a solid middle class of fellaheen is lacking in Egypt; and its creation might be useful for agricultural and productive progress, as might the creation of an urban class owning small or medium size farms, and willing to take an active interest in agriculture.

The very small land-holding peasants will draw no benefit from land sold to escape expropriation. For them expropriation is the only hope; and they may become disillusioned not only by sales to escape expropriation but also by the small area that is left for expropriation. Moreover, it is possible that the reduction of the areas in large properties will diminish—temporarily, perhaps, but too long nevertheless—the employment possibilities of salaried labor and share-croppers.

Other criticisms of the land reform law have been suggested. Opponents say:

1. The fellaheen are not technically prepared to assume management of their farms. They need the direction and technical guidance of the owners. But a superficial acquaintance with agricultural conditions in Egypt is sufficient to show how inconsistent this technical guidance is. Neither on the farms rented to cultivators, nor on those managed under share-cropping is it worth mentioning. Only on a few farms which are run with hired labor and with centralized equipment is it possible to find agricultural organization above the peasant level. However, even these farms can be converted to peasant management with a little extra caution and effort.

2. The large farms are necessary in order to maintain the quality of products, especially cotton. This observation undoubtedly is important, but not of sufficient weight to give up the reform. It must be borne in mind that large farms will continue to exist and that those that are well run can become centers for the production of selected seeds. Furthermore, the extension of fellaheen property should encourage the State to improve technical services.

3. The large and medium size farms have centralized equipment which will be rendered useless by the reform. This criticism is not justified. In Egypt the principal agricultural processing industries are found outside the farms (cotton gins, sugar refineries, dairies, mills, etc.). What central equipment exists is usually rather primitive and there is no reason why it cannot be managed cooperatively.

4. The Egyptian problem is one of too little land and too many people. A mere redistributing of property solves nothing. This is doubtless the major objection which can be brought properly against the reform. But no matter how small a step the present

land reform presents, it is a necessary step towards the modernization of the basic structure of agricultural Egypt.

It should be stressed, however, that land reform by itself cannot solve any of the fundamental agricultural problems of Egypt for the following reasons: 1. The reform will probably reinforce and extend medium size farms, and will thus not meet the social expectations. 2. The reform sets forth only general measures regarding the strengthening of small peasant property, but does not specify the ways, and by which means it will be possible to improve productive capacity. 3. The reform, by itself, does not change the terrible disproportion between men and land; in addition, the demographic increase can annul the advantages brought about by the land reform in a few years. In many cases, the law's supplementary measures (rent reduction, wage increases, etc.) can easily be evaded. The reform does not solve the real problem of life and work of the lowest stratum of fellaheen. Therefore, a long-term program, possibly covering many decades, or even more, is necessary. The principal aspects of such a program should include the following: 1. Extension of the cultivable area; 2. technical improvement of agriculture; 3. support and defense of peasant property; and 4. easing of the pressure of peasants on the land. Each one of these improvements deserves a brief comment at least.

Extension of the Cultivable Area

This program long has been studied both by Egyptians and by foreign technicians. Essential features of a long range plan include: 1. The construction of a main reservoir with a capacity of eight billion cubic meters; 2. the "century storage," a scheme which envisions the use of Lakes Victoria and Albert for storage of precipitation in years of heavy rainfall; and 3. the construction of the Sudd Canal which would allow the Nile to run between the 7th and 10th parallels N. without such excessive losses of water. The total foreseeable increase in available water from these three projects is estimated at about 34 billion cubic meters.

A total of 960,000 feddans could be added by drainage of salty coastal lagoons. The extension of irrigation along the strips of land which follow the lateral border of the Nile Delta may make available an additional 430,000 feddans of irrigated area, provided the water is lifted about thirty feet.

TECHNICAL IMPROVEMENT OF AGRICULTURE

Altho Egypt has a high level of agricultural production, technichal progress can be made in 1. an increase of already heavy fertilization with commercial fertilizers; 2. addition of more farm machinery, especially medium size or small tractors, to be used collectively by peasant cooperatives or by contractors; many tractors need to be replaced; 3. irrigation practices may be improved by increasing the number of modern pumps, as well as by adding more light weight metal pipes; canals should be lined with concrete; sprinkler irrigation in some places may save some water; the fellaheen should be taught to use the optimum amount of water for highest crop yields; many fellaheen believe the greater the amount of water, the greater the yield, and with this belief use too much water; 4. improvement can be made in agricultural processing industries, especially in dairying and in olive pressing; 5. development of mechanization will reduce the number of work animals; 6. more plantations of citrus fruits, deciduous fruits, table grapes, etc. should be started and better methods of pruning and disease control should be applied to the plantations already in production; 7. certain areas of sandy soils may be stabilized and brought into some kind of agricultural production; and 8. more efficient pumping equipment is needed for reclaiming areas needing drainage.

SUPPORT AND DEFENSE OF PEASANT PROPERTY

Agricultural cooperatives probably should be accentuated in all possible ways, especially since today they are limited largely to purchasing and selling. In fact, agricultural cooperation could be the main road to economic and social improvement of the lot of the fellaheen. Cooperatives can expand into a number of activities, into the collective processing of products, collective utilization of machines and implements, development of small handicraft industries, management of plant nurseries and seed selection, and to a larger scale collective sale of products. The cooperatives also might encourage greater extension of social centers, seek to solve better the great problem of safe drinking water, lead the fight against disease, and encourage open and free discussion of problems affecting the common interest.

A word of warning concerning cooperatives should be sounded, however. The cooperative system authorized by the Egyptian law is susceptible to a high degree of state management and control.

Under a corrupt government it could become tyrannical and exploitive. On the other hand, motivated by an honest and far-seeing administration it can be an effective instrument in developing an independent and self-reliant membership. If the latter course is pursued, increased measures of control should be delegated to the members as they develop capacity for managing their own affairs.

EASING OF THE PRESSURE OF PEASANTS ON THE LAND

All the foregoing plans, extension of cultivable area, technical improvement of agriculture, support and defense of peasant property may achieve notable results. However, by themselves they cannot permanently solve Egypt's agricultural problems. Something must be done about the current demographic increase and the present overpopulation of the farming area. In a country with such limited land resources and such dense population, a healthy economic structure cannot be maintained with 75 per cent of the people crowded upon the farms. The answer may lie in expanded industrial or commercial development, in emigration, in reduction of the birth rate, in all of these possibilities and in others too. Whatever the remedy, action should be taken—and action not by Egypt alone but by friends of that country as well. The existence of such a heap of human misery on such rich land cannot be ignored by anybody, and the problem should be faced on the level of international collaboration.

One further point should be added. One of the greatest dangers Egypt faces today is the danger that people will become impatient with the present regime and demand a rapid change in the bad farming situation that has existed many thousand years. Deep thinking upon good plans, hard work on their fulfillment, wholesome cooperation among all concerned—all of these are needed to bring even a slow improvement. The long term goal must be thought of in decades, not in terms of months or years.*

* Much of the author's information is based upon reports by Mario Bandini and Paul V. Maris, consultants for the Italian and American Embassies in Egypt. However, the author takes full responsibility for opinions stated.

THE CHILD LOOKS UPON THE MAP

Mamie L. Anderzhon
William Beye School

Altho most children enjoy looking at maps, it cannot be taken for granted that they can read the map language without instruction. What are some of the attitudes towards maps of some of these consumers and users of maps at the elementary level? Knowing and understanding these attitudes is of greatest importance to cartographers, because they assist in the designing of both general and special purpose maps produced for an annual elementary school enrollment of more than 25,000,000 boys and girls. Therefore it is essential that their "map language" be keyed to the interest and understanding of the different age groups, as is that of reading, arithmetic and other classroom studies. The statements made in this paper are based upon observations, experiences, unsolicited comments and answers to questionnaires from approximately 750 children in grades below nine, during the past 6 years. They should not be interpreted as conclusive because much more research is needed in this area of cartography; neither should what is reported in this paper be considered adequate map experiences for pupils at the grade level for which data is given.

Boys and Girls Use Maps

A study of these observations, experiences and comments shows that many 6 and 7 year old children are curious about maps, but it is not until about fourth grade, ages 9 to 10 years, that approximately 65 per cent of the children use maps and globes as a "pointer device" for locating places and tracing trips or routes of trips, either real or imaginery. Forty-three per cent of the children report that road maps are the first maps they recall using and handling. This experience was usually outside the classroom. The most frequent answer given to the question, "Why did you use the road map?" is "To keep from getting lost."

Another 30 per cent of the children reported their first interest in maps grew out of seeing and handling the physical-political globe and using the wall maps of the United States and the World in the fourth-grade classrooms.

Interest in maps began at about second grade for less than 10 per cent of the children interviewed. This was when they selected landscape features for their home, school, etc. and arranged these symbols on a large scale floor map that had been made by the teacher. It appears that, when given the opportunity, 6 to 8 year olds develop a genuine interest in making an imitation of their local and immediate neighborhood on a large scale outline map, oriented on the floor. From this experience the children developed a sense of direction and acquired the basis for a sense of scale along with some concrete "feel" for distance. To these particular children they knew that eight blocks in their neighborhood represented a mile.

The interests of 9 and 10 year olds reach beyond their local neighborhoods. They like to "go places." Maps tell them where places are located, especially with relation to how far it is from where they live. They want to know how to go from "here" to "there" and how long it will take. They are also interested in places on a map with relation to other features such as rivers, lakes or mountains, especially if they have some familiarity with how the feature looks. They can visualize on a map semi-pictorial symbols such as coast lines, rivers, lakes, as well as some of the less pictorial symbols shown in color, dots or isopleth lines. They are beginning to reason and what to know the "why" for their observations. Often they want to see the symbol for the landscape feature on the map. They know that water runs down hill, so color or shading on a map for different elevations takes on some sense of slope especially when the child feels the necessity for adding a few contour lines to his own map in order to show places that have the same elevation. Also intensity of color and shading on maps seems to help some children to feel the third dimension as he visualizes elevation and slope.

BOYS AND GIRLS READ MAPS

We need to be careful that we do not underestimate what children can do and overestimate what they know. They do want their observations to be realistic and to make sense to them. It is at this age that children are discovering that learning how to read gives them the power to read to learn. Learning to read and to use the legend requires teaching. Curiosity in what he can read from wall

maps, road maps and globes develops as the child discovers symbols and how to interpret those symbols on the map. The pupil's first interest in preparing his own map may start with his locating and recording of specific features in his local landscape. He soon discovers effective ways that he can use color combinations, dots, shading and line symbols.

This age level is still struggling with scale and requires many concrete experiences with distance in miles and hours, areas in square miles in the real landscape, and expressions of elevations in feet in order to begin to pull into focus large areas into a map that can be handled and used. If children are really catching the feel of scale they will habitually check the scale for the number of miles to the inch or look for two lines of latitude so they can estimate the distances on the map. At this age, scale expressed in miles has more meaning than the use of the representative fraction. Junior high pupils will often study a map and ask "What does this map tell me about how this place looks, and what do the people living here do for a living."

Latitude as it indicates distance from the equator, seasons, position of the sun and direction is considered important by children at this age only as it is taught and used over and over as a means for reading more about places from the globe or map. In this air age the interest children exhibit in what time it is in other places is making longitude on the globe much more concrete and real. By the end of junior high, pupils can and do use latitude and longitude as a guide for discovering distortions on a map.

For this upper grade and junior high level, maps are a source of information, about location, direction, distance, elevation, slope, landforms, patterns of arrangements and distributions of cultural and physical features, and relationships between what people do and how they use the earth. Maps are also instruments that raise questions about people and landscapes. For example when the eighth-grade class was introduced to the 1950 Bureau of Census, May showing both urban and rural population distribution the first question was, "What does this map tell us?" The second was, "Why the densely peopled places and why the sparcely peopled places?" This sent some of the class to the globe and others to atlases, wall maps, and Dr. Raisz's Landform Map of the United States in search of possible answers that were checked by comparison of data.

BOYS AND GIRLS REQUEST BASE MAPS

Upper grade and junior high pupils frequently request outline maps for showing a single idea or relationship between geographical features of factors that are mappable. They will take initiative in experimenting with making a map tell their story.

Five years ago the junior high pupils were examining some data I had on one of Dr. Raisz's Landform Maps of the United States. Several of the children asked, "Why can't we each have one of these maps?"

When I asked them why they wanted the map their replies ran like this:

"It gives me a better idea of how the land really looks in all of these different places." Billy was pointing out the Mississippi River Basin of which his own state of Illinois is a part.

"It tells me more about the 'ups and downs' of these hills," remarked another as he pointed to the Driftless Area he had visited in Wisconsin.

"I can feel the way the top of the earth looks when I study this map," came another reply.

Other remarks were:

"We could show all of the rivers' drainage patterns and really show where rivers flow down hill."

"We need one of these maps when we take trips so we can watch for all of these features and be able to name them."

For what do junior high boys and girls use maps most often? About 90 per cent use both commercial and base maps for showing locations and relationships of man's activities to the natural features, or an idea. At this age they seem to like to play up single ideas on a map. They call this making their map tell one story. About 20 per cent use maps for planning trips on their own, or following routes of trips they take with their parents.

Over half of the pupils report they like to study maps just for fun. Many of them have collections of maps which they may share with their classmates in reports. More and more are using maps in connection with their reading, and current events. Several of the boys report they have worked maps into their room decorations. Some fit photographs onto or at least locate them on maps, and then there are always several in every group who like to outwit the other one in locating out-of-the-way places, and even speculate on what the place is like after considering such factors as latitude, altitude, slope, landform, rainfall and prevailing wind which they can read from different maps.

Conclusion

Such are the attitudes children bring to maps, and consequently great are the responsibilities and opportunities for the cartographer. Only the cartographer can provide the children of various ages with the thought-producing map material that will aid them to understand the vital relationships of earth surface and earth resources to what people do in work and play, and where they do it.

These maps also contribute to the children's appreciation of natural and international problems thus developing in these citizens of tomorrow a constructive approach to problems.

HIGH SCHOOL GEOGRAPHY CLASS CONSTRUCTS RELIEF AND POLITICAL WALL MAP

Thomas Feeney
Bellport High School, New York

An effective classroom activity for a high school geography class is the construction of a relief and political wall map. My ninth grade class constructed such a map of Korea covering an area approximately nine feet by nine feet.

The initial problem was to get an accurate outline of the map on the wall. This was done quite simply by placing a map of Korea from any reliable source, preferably an atlas, in the opaque projector and projecting the map on the wall. Tracing this outline was the first step.

Next we attacked the problem of locating relief on the map. With the aid of Goode's school atlas, a sheet of graph paper and a couple of reliable students, a scaled reproduction of the relief of Korea was secured. To reproduce this on the wall required that it be squared off and then the general contour lines of relief be blocked in. It was decided to divide the relief patterns at intervals of 500 feet, 1000 feet, 2000 feet and 5000 feet. It was necessary to be quite arbitrary about the distance from the wall that the high points of each contour section should come.

To actually produce relief which would adhere to the wall and stay there, and, at the same time be able to be removed (in the event

another area of the world would assume the significance of Korea in the past few years), was a major difficulty. The following plan was followed. Pieces of old burlap were cut up and glued to the wall within the pencilled relief outlines. It is extremely difficult to cut the burlap to exactly fit the outline. Best results can be secured by cutting up small pieces of burlap and fitting them close together. Any commercial glue will be satisfactory. Later on when removing this map, a putty knife slipped under the edge of the glued burlap and pried up, removes the whole area quickly and simply.

Plaster of Paris worked out well as the material for use in actually building out the relief. It was necessary to work this material thoroly into the burlap to secure the necessary adherence. The height must be built out gradually over a period of time and occasionally as it dries, pieces of burlap will thus pull away from the wall around the edges. Redoing this section will form a firm bond once again. It is my opinion that spackle would also serve this purpose.

The final step is to paint the map. In this case we followed the traditional color pattern to indicate lowland and mountainous regions.

Each class period two students worked on the map. This was rotated thruout the class and I attempted to adapt some phase of the work to fit the individual abilities of the class members.

The project when finished was an exceptionally effective visual representation of Korea and the problems of fighting a war there. It also required the use of geography tools such as atlases and maps, some knowledge of mathematics and art and, at the same time, it was an outstanding attention getter. Thus, correlation with other departments of the school is possible. Further, many problems appeared which had to be solved by the ingenuity of the students themselves, since reports on such a project were not available or known either to myself or our audio visual man.

A FIELD ASSIGNMENT IN THE GEOGRAPHY OF MANUFACTURING

ROBERT ELI CRAMER
Library of Congress

Manufacturing as an element of geography is receiving increasing attention in the classroom.[1] Instructors find, however, that students are not personally familiar with the manufacturing activities that they study. Many students have never worked in, or visited, a manufacturing plant.

The academic personal introduction to manufacturing activities usually is in the form of a class field trip to a local manufacturing plant. A company guide conducts the class on a tour of the plant, explaining in detail the sequential steps in industrial processing. Such a trip may be both interesting and profitable, but information of interest to the geography student tends to be overlooked, or the guide is not informed. In such a visit to a large manufacturing plant, the students of the writer once talked with a guide who had to confer with an executive three times before he could satisfy them as to the source area of a major raw material.

Basic factors in the geography of manufacturing should be of primary concern in a plant visit, and a tour of the processing activities should be secondary. Some of these basic factors of interest to the geography student are: What materials are used? Where are the source areas of the materials? What types of companies buy the finished products? Where are the major market areas? What method of transportation predominates? What are some of the labor characteristics? What are some of the influencing factors in the localization of the plant in the area and at its site?

Some instructors believe that insight into industrial activities can be obtained best when students, as a group, hike up and down streets of industrial areas peering over fences into plants. This type of study restricts the examination to the industrial land use of the local community.

THE ASSIGNMENT

This paper describes an assignment in which students study as many manufacturing companies as can be visited in the field by

[1] John W. Alexander, "Geography of Manufacturing: What is It?" JOURNAL OF GEOGRAPHY, XLIX (October 1950), 284-287.

small teams of two or three students each; the instructor does not accompany the teams. Interviews are scheduled directly with company executives and students ask carefully prepared questions. Reports of the interview and plant tour are written by each team and discussed in the classroom.

The writer has organized and supervised three field assignments as described in this paper, in as many communities. Contacts were with a total of 96 major manufacturing companies. Altho the assignments were conducted as part of college economic geography courses, they could be organized at the high school level, with closer supervision. The period of time involved in the studies varied from two weeks to a major semester project.

To initiate the field assignment, the student should be introduced to the 20 manufacturing groups[2] as used by the United States Bureau of the Census and by various other agencies. That can be either a cursory one-day instruction, or a broader approach in which all manufacturing companies in the community are classified into manufacturing groups. In a course where six weeks were devoted to manufacturing, the writer's students compiled cards on all community manufacturing companies, as listed in the state manufacturing directory. The name of each company, the address, number of workers employed and products manufactured were taken from this directory and 780 cards were compiled. The companies were then classified into manufacturing groups and further divided into subgroups. Student teams that had expressed their desire to work together selected the manufacturing group in which they were interested. Each team plotted on a separate city map the location of all manufacturing companies in the community that fell within its group classification. Here was a valuable lesson in locating streets and addresses by use of coordinates. Different symbols indicated company size, according to the number of workers. These maps formed the basis for selecting a company to visit, and permitted the student to visualize the locational pattern of all community plants manufacturing similar types of products

Three additional items are necessary in preparing the student for a visit: A written sheet of instruction; an outline to follow in interviewing; and practice interviews in the classroom. The instruc-

[2] United States Bureau of the Budget, *Standard Industrial Classification Manual*, Volume I, *Manufacturing Industries*, Part I, Titles and Description of Industries (Washington: Government Printing Office, November, 1945).

tional sheet should contain such information as when the report is due, suggestions for writing the report, purpose and objectives of the assignment and a general "pep talk." The purpose and objectives of the assignment and the interview questions must be thoroly understood by the student before talking with a busy executive, and it is advisable to test, by practice interviews, his grasp of the fundamental concepts thru questions he will ask.

The introduction of the instructor to the company executive and the explanation he gives of the project will influence the relationship that the students have later, and subsequently the success of the assignment. One or two companies should be selected in each manufacturing group, depending upon the number of student teams. It is well to select the larger, well-known companies, since smaller companies tend to be suspicious of inquiries and frequently are reluctant to give company information. A request to the company switchboard operator to talk with someone about a visit to the plant will usually bring a referral to an executive who can authorize the visit and who frequently agrees to talk with the student himself. It should be made clear to the executive that the emphasis is on an interview and not a plant tour. In one study, using this approach, the writer's students interviewed five presidents, eight plant superintendents, four treasurers, four public relations managers and three chiefs of personnel. The date and time of the interview can be agreed upon over the phone.

It has been the writer's experience that company executives welcome opportunities to talk about their organization and activities to interested students and consider the assignment a worthwhile effort towards community and economic understanding.

INTERVIEW OUTLINE[3]

I. Products:

A. What are the products manufactured? B. Per cent of total output?

1. _____ _____

2. _____ _____

3. _____ _____

C. Approximately how many units per week or year? _____

D. Is the production seasonal? _____

[3] Data obtained from this or a similar outline can be used for various purposes. The writer's study on the Cicero District of Illinois was based on data obtained from a slightly revised outline: Robert E. Cramer, *Manufacturing Structure of the Cicero District, Metropolitan Chicago,* University of Chicago, Department of Geography, Research Paper No. 27 (Chicago: University of Chicago Press, 1952).

II. Markets:

A. What type(s) of companies (or people) buy the products? _____

B. Where are the major market areas? C. Per cent of total?

1. _____
2. _____
3. _____

D. Major method of transporting products to market? _____

III. Materials:

A. Major materials used? B. Per cent of total?

1. _____
2. _____
3. _____

C. Source areas of materials? D. Per cent of total?

1. _____
2. _____
3. _____

E. Major method of transporting materials to the plant? _____

IV. Labor Characteristics:

A. Labor composition:

1. Total labor force? _____
2. Per cent women? _____
3. Ethnic composition? _____

B. Residences of the workers (section of community)? _____

C. Transportation methods to and from work? _____

D. Employee benefits offered by the company? _____

V. Company History and Structure:

A. Organizational date of the company? _____
B. Date of settlement at present site? _____
C. Reasons for locating in the area and at the present site? _____
D. Former location? _____
E. Satisfactory location? _____
F. Company structure (main plant or branch plant)? _____

VI. Physical Plant:

A. How many acres does the plant cover? _____
B. Size and shape of the buildings? _____
C. Equipment? _____
D. Warehouse facilities? _____
E. Loading and unloading facilities? _____
F. Open storage? _____

VII. Other Information:

May include a discussion of distinct exterior characteristics that would permit visual identification of other plants manufacturing similar products.

Conclusion

The study of community manufacturing companies by small teams of students permits personal familiarization with many types of manufacturing activities. In place of a class visit to one or two companies where students are spectators to processing activities, the student examines the fundamental factors in the geography of manufacturing. This can be achieved best thru personal interviews with company executives, supplemented by a tour of the plant.

VISUAL EDUCATION BY MAIL

Gwen Schultz
University of Wisconsin

Until recently students who learned geography by the correspondence method missed the many stimulating features of classroom teaching. They received their assignments by mail, wrote them up and returned them by mail for evaluation and comment—the customary procedure in all correspondence courses. But they never saw an illustrated lecture; never held a hunk of feldspar in their hands while someone described its cleavage and its luster; never examined a topographic map.

They should be shown that geography can be read not only in the flat pages of a textbook, but also—and more clearly—in the skies and hills, in their travels and in their own backyard. Now, thru the addition of visual aids, the Geography Department of the University of Wisconsin Extension Division is attempting to make geography more appealing and realistic to the student who studies alone.

"The Physical Earth and Its Resources," a three-credit college course offered by the University of Wisconsin Extension Division, lends itself readily to the use of visual aids. How this writer utilized them in modernizing that course may be of some help to others who are contemplating similar projects. As far as is known, this is the first time that visual aids have been used in this manner in geography correspondence teaching.

SLIDE KITS

Each student is now sent four kits of colored 2 × 2 slides at planned intervals during this 24-assignment course. The slides he receives illustrate the block of work in which he is engaged at that particular time. Altogether he sees about 175 slides; more are being added to the collection as they become available.

The slide mailing kits are somewhat smaller than a shoe box and resemble, in miniature, a laundry mailing case with fastening strap and frame for address card. They are sturdy and well-padded, and were especially designed to hold the contents safely and compactly.

The felt-lined interior is divided in half. One section is a fitted slide file for 50 mounted slides. The other section holds a small viewer and a pack of 3 × 5 index cards. It allows room for additional slides if necessary later. The 3 × 5 cards carry printed descriptions of the slides, each card bearing the identification number of its respective slide. All cards comprising a particular unit of study are the same color to aid in distinguishing one unit from the others.

The choice of slide binders was an aluminum frame style with celluloid windows. These are easy to mount, unbreakable and can be labeled by typewriter. Moreover, they are very light, an item to consider in connection with postage costs.

A kit, when mailed, also contains a return address card, which bears accurate postage for the return trip and is addressed to the Extension Division Library (which handles the sending of the kits just as it would a book). So all that the student need do in returning the kit is replace the label addressed to him with this one addressed to the Library. Printed directions for use of the kits, and two insurance coupons (one for going and one for returning) are also inside.

These kits go anywhere—even overseas. As yet no loss or breakage has been experienced. As a precautionary measure, "FRAGILE" labels have been put on the outside of the kits.

The use of slide kits may seem an expensive venture, but it can be justified, and there are ways of minimizing the costs. This was an experiment, and experiments are not conducted without some expense. It is hoped that increased enrollments will offset the added expense. Also, it is now planned that slide kits will be added to other courses, and if kits can be used interchangeably in several

courses the cost will be spread thinner. The kits, of course, remain the property of the Geography Department and should serve for many years. With larger orders in the future, it is hoped that expenses will be cut considerably. Substantial discounts were obtained on most supplies and services. By writing direct to one manufacturer, we were able to get a 40 per cent discount on our order. Another company allowed 30 per cent.

Furthermore, all slides used have been photographed by our own instructors in the Geography Department of the University of Wisconsin Extension Division, and so the only expense there is the cost of film and duplication.

Rock and Mineral Kits

Samples of common rocks and minerals are also sent to students in this course. The samples are either collected by members of the Department or are purchased from a concern which supplies them to the University. They are broken into pieces, roughly a little larger than a walnut.

The samples are labeled in the following manner: First, a small area of the rock or mineral is painted with white enamel. Second, on this smooth white surface identification numbers are printed in India ink.

Accompanying the kit is a booklet in which the rocks and minerals are identified according to number and are described in detail.

They are mailed in a cardboard box approximately seven inches square and two inches deep, partitioned into sections, egg crate fashion. The cover fastens on simply with two metal prongs. Each rock or mineral is wrapped individually in a piece of dark colored cloth, pinked on the edges, which prevents rattling in the box and serves as a background foil to set off the specimens, some of which are quite attractive.

A gummed label, bearing postage stamps and the student's address, is placed on the cover of the box. Inside, there is another gummed label properly stamped for return mailing and addressed to the Library. The student affixes this label directly on top of the one used previously and secures the cover with the metal prongs. Then, the box is ready to mail back. Directions are, of course, included.

MAPS

Instructional maps and diagrams appear frequently thruout the course. And a topographic quadrangle is used in an exercise dealing with stages of erosional development and drainage patterns.

If the student does not have access to an up-to-date atlas, he may borrow one from the Library for as long as he needs it, no matter where he is.

RESULTS

Do the students benefit from visual aids? They certainly do. They tell us so. And there is an increase in personal correspondence from them. They are full of questions about things geographical that they have seen, and often send us pictures they have taken. They want more references, more maps.

We are kept busy doing research on the inquiries that come from these correspondence students whose curiosity has been aroused. One obviously inspired by the rock kits, has taken to chipping and scratching famous old buildings in Europe to ascertain what type of stone they are built of.

We have made more work for ourselves, but after all, that is our job—teaching geography. We feel we are moving a little, at least, in the direction of producing field geographers with open eyes instead of purely book geographers.

ECONOMIC GEOGRAPHY IN THE MIDDLE SOUTH

ALEXANDER I. WARRINGTON

An effort has been made to learn something about teaching methodology and general aims in the subject of economic geography in the Middle South (Louisiana, Mississippi and Arkansas). The personal interview method was employed and both State and private universities and colleges were included in the travel itinerary.

PHILOSOPHIC DELIBERATIONS

Economic geography has become more than an inventory of minerals, factories and channels of trade. The course is apt to

include philosophic deliberations. A very strong force has been present in teaching methodology which has become more and more pronounced during the past decade, and this force, it is believed, has originated with the basic thesis that the greatest of all resources is knowledge. As the full import of this realization becomes clearer, it also follows that the professors are acceding to their increased liabilities; the increased liabilities stem from the understanding that education cannot be confined to the class room. Worthy messages, many of which become clear upon the completion of research projects, are not the exclusive property of registered students, but belong to the people. The principal media of reaching the people are thru direct talks, articles in non-professional periodicals and releases in the newspapers, and reprints of the professional journals for selected and sometimes general distribution.

Provincialism. Provincialism has been a very trying problem for educators and it is not broken up by simply denouncing it. In Arkansas this engima has been met most realistically by factual presentation of the dependent nature of the Arkansas economy on the surrounding states. Aside from the salutory effects of such erudition, the thesis is also made plain that micro-geographic investigations are always a living part of macro-geographic entities.

Regionalism and Environmentalism. Regionalism and environmentalism have received neither fanatical acceptance nor rejection. The known and proved evidence is given in a manner completely devoid of preconceived conclusions with the thought that people are capable of coming to their own terminations. In the Middle South there have been many alterations of the landscape from industrial intensification; therefore, it can be hardly expected that the patterns have had time to settle.

Economic Geographic Research. Economic geographic research is extremely challenging because of the highly dynamic condition of the socio-economic forces. Swedish geographers have repeatedly mentioned the importance of studies of motion and it should be reassuring to some of them that such analyses are in progress in the Middle South. To list all investigations of this character would result in an imposing bibliography. In a short article it is not possible to give much evidence of trends, but a few citations would be something like this: studies in population characteristics; population movement and migration; various effects of the tax structure; resource utilization; and human potentialities.

Teaching Methodology. Economic geography teaching methodology adheres to strong central themes. The theme which seems to be in most common use is climatology and another is natural resources. The elasticity of thematic selection, ordinarily governed by the professor, is most commendable because it is possible to adjust the course to other course offerings. A course in economic geography in arts and science would be different from the same course in business administration, and then there would be further adjustments depending on the stated aims of the different colleges in the area.

Use of Journals. Both economic and geographic journals are in wide use by professors teaching economic geography. The journals give the teacher an opportunity to study the methodology and thinking of other professors and to compare the course offering with other colleges and universities. The journals are important auxiliary considerations to the standard text. Furthermore, the subject is moving at such a rapid tempo that current information is absolutely essential.

Cooperation With Industry. Industry has proved most generous in cooperating with colleges and universities. This subject was discussed in the September, 1950 issue of the JOURNAL OF GEOGRAPHY, Vol. XLIX, No. 6. Since that date, a great many reprints of articles have appeared which have been financed by large corporations. For example, "Our Inexhaustible Resources," by Eugene Holman appeared in *Atlantic Monthly* and reprints of this fine study were made available to schools by the Standard Oil Company of New Jersey.

Economic Geographic Bibliographies. A number of comprehensive bibliographies of interest to the economic geographer are now available. Some of the sources are as follows: Middle South Area Office, International Trade Mart, New Orleans, Louisiana; Bureau of Business Research, Louisiana State University, Baton Rouge, Louisiana, and other colleges and universities in Louisiana, Mississippi, and Arkansas. Study is now in progress so that bibliographies will be available from one source, and when this task reaches some degree of completion, an announcement will be made.

SOME CONCLUSIONS ENUMERATED

1. Economic geography is so tremendously dynamic that teaching methodology is under constant study and revision.

2. Economic geography in the Middle South has made great strides in various research disciplines.
3. Standard references are: the textbook, the journals, special publications, the government, published research reports, reports from the mercantile world, and various foreign sources.
4. Most economic geographers have developed a philosophy which is apt to be eminently practical.
5. Economic geographers in the Middle South are concerned with utility and application rather than with abstract theories.
6. Economic geographers have made contributions to a better understanding of the interrelationships, both national and international.
7. Economic geography seems to be on a solid foundation and destined to have a brilliant future.

THE HORTICULTURAL SUPPLY OF THE CHICAGO METROPOLITAN AREA

ARVIN HAHN
Concordia Teachers College

The Chicago metropolitan area is situated within some of the most productive agricultural counties in the United States and is surrounded by the rich agricultural interior of our country. Nevertheless, the Chicago area, as well as most other metropolitan centers, is dependent upon distant states for the bulk of its fruit and vegetable commodities. Truck and railroad shipments, upon which this study is based, made up about 80 to 85 per cent of the Chicago metropolitan area's total vegetable consumption and from 90 to 95 per cent of the fruit consumption.[1] Based on population and shipment data for the Chicago metropolitan area, it can be assumed that in 1952 one carlot of fresh fruit received on the market served approximately 157 people; of vegetables, 93 people.

SOURCE OF SUPPLY

Chicago received horticultural foodstuffs in 1952 from 43 states and 19 foreign countries. Seventeen per cent of the unloads came from Illinois, the states touching its borders and Michigan. Fig. 1.

[1] Statement by Mr. J. A. Hunter, Chicago Representative, Fruit and Vegetable Branch, Production and Marketing Administration, United States Department of Agriculture.

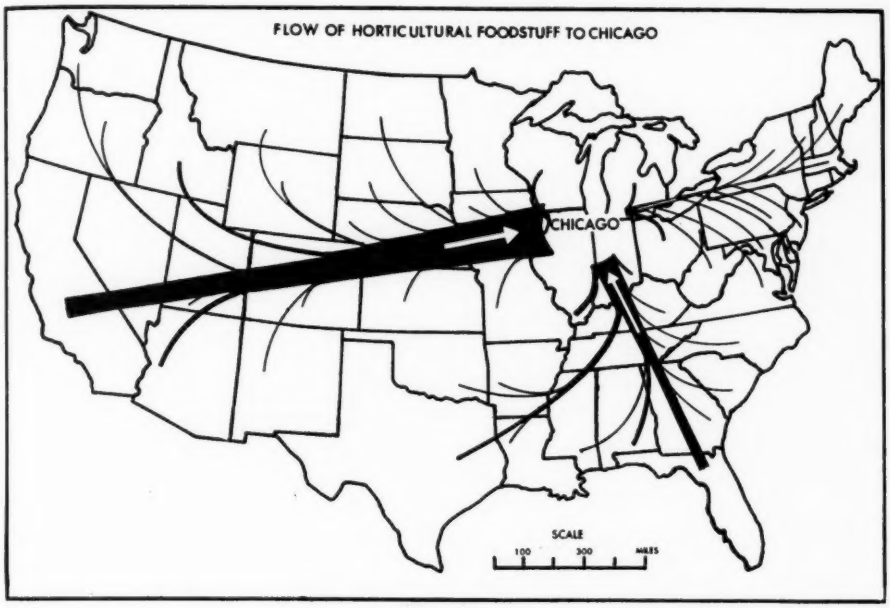

FIG. 1

Illinois and Michigan were the prime contributors with seven and six per cent respectively. Seventy-nine per cent came from more distant states. Fig. 1. California contributed approximately one fourth of the total received and rated first among all the states. Florida's contribution was slightly less than half of that of California's. Texas, Idaho, Arizona and Washington each supplied about one twentieth of the total. Seventeen of the more distant states provided less than one tenth of one per cent of the total receipts at Chicago. Foreign imports, primarily from

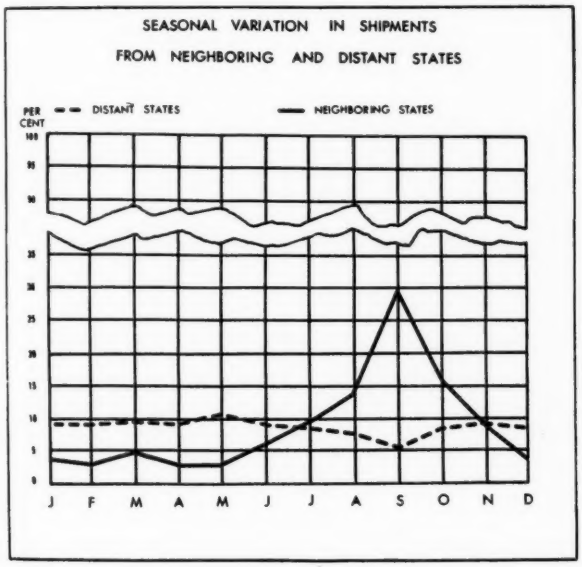
SEASONAL VARIATION IN SHIPMENTS
FROM NEIGHBORING AND DISTANT STATES
PER CENT
DISTANT STATES
NEIGHBORING STATES
J F M A M J J A S O N D

FIG. 2

Canada, Mexico and Middle America, made up the remaining 4 per cent of the total.

Seasonal Variations

Shipments to the Chicago market fluctuate little thruout the year except for the months of August, September and October when sharp increases were noticeable. Fig. 2. The late summer and fall rise was due primarily to the increase in the unloads from Illinois and neighboring states. These states accounted for 28 per cent of their yearly shipment in the month of September alone. Shipments from more distant states indicated far less seasonal variation than those from Illinois and neighboring states. California was outstanding as the most consistent contributor to the Chicago market. Florida sent little produce during August, September and October. Texas made its greatest contribution in the winter and spring months.

Varieties

Ninety-one varieties of horticultural products were sold on the Chicago market. Of the 43 varieties sent from Illinois and neighboring states, 30 were vegetables and 13 were fruits. Illinois, Indiana, Missouri and Wisconsin contributed about 75 per cent of their produce as vegetables. Michigan was the outstanding neighboring fruit contributor. On a carlot and variety basis, the more distant states, taken collectively, were larger contributors of vegetables than of fruits. Forty-nine varieties of vegetables and 27 varieties of fruits were shipped from these states. Vegetables were received from all the distant states, whereas most of the fruit shipments came from California, Florida, Washington, Texas and Oregon. California sent 37 varieties of vegetables and 21 varieties of fruits, altho its carlot contributions were about even. About half as many fruit as vegetable varieties were received from Florida.

Conclusions

Facts cited in the aforementioned data concerning the fresh fruit and vegetable supply of the Chicago metropolitan area are illustrative of two basic laws of agricultural economic geography. 1. Demand by consumers for a great variety and amount of foodstuff continues year-around. 2. Production of various commodities is limited by varying environmental conditions in the different areas of the earth.

Data on fresh fruit and vegetable marketing in the Chicago area indicates maximum consumption during the summer period. This seeming contradiction to the first law is largely offset, however, by the continued increase in demand for processed horticultural foodstuff, frozen and canned, which finds its greatest market in the off-season period.

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TEACHING UNIT: LUMBERING IN PACIFIC NORTHWEST

KENNETH J. WILLIAMS
Oakland, Oregon

Grade: Seven

Time Allotment: Approximately three weeks

Classroom textbooks: *Your Oregon*—Woods and Rogers
The Pacific Northwest—King and Fullenwider
Geography of a Working World—McConnell

Overview

Lumbering in the Pacific Northwest is an economic activity that has a great influence in the lives of the people in this region. Our historical development is linked with the forest and its uses. The future is dependent on our wisdom and insight in the general use of the forest.

Since the infiltration of the white man, the forest has provided fuel, shelter and livelihood for a majority of the population. The value of forest products, their extent and character, the numbers of people employed there and its influence on the economy of this area will give us an idea of its importance as a major natural resource of this region. The Pacific Northwest contains two-thirds

of the entire old-growth saw timber in the United States: therefore, it is the largest timber stand in the nation. With good foresight and management, this region will be a reservoir of timber for the nation's use and will build to the good of the region.

A student in school has the responsibility of acquiring an understanding of this very important economic activity. This unit should make a major contribution in this direction.

Desired Outcomes

1. An understanding and appreciation of the role of lumbering in the Pacific Northwest as related to the nation and the rest of the world.

2. The development of an understanding of the basic principles of lumbering as a part of the entire economy.

3. The development of planning for conservation of this natural resource.

APPROACHES

I. Preplanning
  A. Teacher
    1. Self-orientation
    2. Define the unit
      a. direction
      b. boundaries
    3. Accumulate desired teaching aids and materials for ready use.
    4. Outline the unit activities as to timing.
      a. class discussion
        1) leading questions
        2) organization of discussion groups
      b. reports
        1) decide topics
        2) gather reference material
      c. projects
        1) decide projects
        2) collect tools
        3) collect materials
      d. field trips
        1) make arrangements with administration
        2) make arrangements with places to be visited
        3) make arrangements for transportation and physical needs
      e. visual aids
        1) preview
        2) select
      f. outside speakers
        1) make arrangements with speakers
        2) make arrangements for school facilities and hospitality

g. demonstrations
1) plan order of demonstrations
2) have materials available
h. committee work
1) decide problems
2) select group from which class will pick pertinent questions
i. collections and exhibits
1) if available
2) make arrangements to borrow
j. questionnaires—letter writing
1) decide to
2) to whom

B. Class
1. Interest
a. bulletin boards display
1) pictures relating to the unit
2) newspaper, magazines and brochure clippings
b. discussion questions placed on the blackboard or tossed out to the class
c. impulse exhibits
1) samples of lumber
2) samples of cones and boughs
3) lumbering and logging equipment such as, saws, axes, etc.
d. give informational releases on current problems and developments in lumbering and logging industry

II. Introduction of Unit
A. Lecture introducing the scope of the unit, illustrating major high spots, timing tentative activities and projects within the unit, and means of evaluation.
B. Show the educational film entitled: "Lumbering in the Pacific Northwest."[1]
C. Class response
1. Develop the unit according to the students' interest within reason and feasibility.

III. Development of the Unit
A. Vocabulary
1. General terms used in lumbering and logging.
2. Geographical terms related to lumbering and logging.
3. Organizational terms related to lumbering and logging.
B. Historical development of lumbering and logging
1. Lumbering started in the White Pines of the New England States (until 1850)
2. Lumbering moved into the States of New York and Pennsylvania (until 1870)
3. A westward movement to the mixed forest around the Great Lakes States (until 1900)
4. Lumbering moved south to the area of the Southern Pines (until 1915)
5. The movement to the Pacific Northwest States of Washington and Oregon and the center of lumbering is still located in this region today.
6. Suggested Procedures
a. Have the children indicate this lumber-movement on an outline map of the

[1] This educational film is listed in the visual aids bibliography.

United States. Draw in the regions and indicate direction of movement by arrows.

7. Suggested Activities
   a. Show the educational film entitled: "There's More Than Timber in Trees."[2] This shows the movement of the lumbering industry.

C. Local—Lumbering in Eugene and Willamette Valley.
1. Textbooks and Teacher Reference Books
   a. *Your Oregon,* Woods and Rogers, pp. 29-30.[3]
   b. *Oregon Geography,* Dicken, pp. 95-102.[4]
2. Suggested Procedures
   a. Since there is very little material available for Eugene and Willamette Valley, it would be desirable to have group reports. Make a list of possible topics and let the students select their group. The following are the subjects students could report on:
      1) Types of sawmills
      2) Logging methods
      3) History of logging in Willamette Valley
      4) Cost of logging equipment
      5) Where and how lumber is shipped
3. Suggested Activities
   a. Show the educational film entitled: "Trees to Trade."[5]

D. Other forest regions in the Pacific Northwest.
1. Textbooks and Teacher Reference Book
   a. *World Economic Geography,* York-Rowe-Cooper, pp. 411-413.
   b. *Geography of a Working World,* McConnell, pp. 119-142.
   c. *Regional Geography of Anglo-America,* White and Foscue, pp. 791-798.
   d. *The Pacific Northwest,* King and Fullenwider, pp. 195-221.
   e. *A Regional Economic Geography,* Dicken, pp. 78-80.
   f. *The Pacific Northwest,* Freeman and Martin, pp. 255-297.
   g. *Physical and Economic Geography of Oregon,* pp. 222-233.
   h. *Economic Geography,* Colby and Foster, pp. 180-197.[6]
2. Suggested Procedures
   a. Orientate students to the areas of forested lands in the Pacific Northwest. Point out the specific regions such as, Coastal Forest, Cascade Forest, Western Pines, Blue Mountains forest, Salmon River and Clearwater Mountain forest.
   b. Divide the class into groups and have each group select a forest region for a group project. Have the children cover the following points:
      1) Where was the first sawmill in the region?
      2) What are the types of trees growing in the region?
      3) Where were the forest fires that have been recorded in the region?
      4) What conservation measures have taken place in the region?
      5) Where is the lumber marketed?
      6) How is the lumber taken to the market?
      7) On an outline map of the Pacific Northwest, show the region.

[2] This film is listed in the visual aids bibliography.
[3] This book is listed in the classroom textbook bibliography.
[4] This book is listed in the teacher reference bibliography.
[5] This educational film is listed in the visual aids bibliography.
[6] These books are listed in the classroom textbooks and teacher reference books bibliographies.

3. Suggested Activities
   a. Show the educational films (1) "On the Trail of Pilot Rock Pines," (2) "Green Harvest," and (3) "Tree and Homes."[7]
   b. Select outside speakers: Forest Ranger to discuss services, needs of fire protection and methods of fighting forest fire; nursery man to speak on how and why of a tree farm.
   c. Following the talk by the Forest Ranger, present the Kodachrome slides on "Fighting Fire in the West Coast Woods," and show the educational films "Smoke Jumper" and "Telephone Creek."[8]
   d. Present the "Wood Study and Identification Kit" to become familiar with the different types of woods.[9]
   e. Write a short theme about the life of a tree. This could be in the form of fiction or make-believe illustrating the growing-up of the tree.
   f. Make a scrap-book showing all the equipment used in logging and lumbering industry.
   g. Make a collection of the boughs, cones and leaves of trees found around your home.

IV. Culminating Activities
   A. Map Work
      1. Use an outline map of the Pacific Northwest showing the areas where the following forest are growing:
         a. Spruce forest
         b. Douglas Fir forest
         c. Yellow Pine forest
         d. Sugar Pine forest
         e. Lodgepole Pine forest
         f. White Pine forest
      2. Use an outline map of the Pacific Northwest showing the major road and railroad routes in the Pacific Northwest. Also, indicate harbors for shipment of lumber and points which are centers of distribution and marketing.
   B. Have the children do projects showing the relationship of the Pacific Northwest to the United States and the rest of the world.
      1. What percentage of lumber cut in the United States comes from the Pacific Northwest?
      2. What percentage of the world's lumber comes from the Pacific Northwest?
      3. What percentage of forest land of the United States is found in the Pacific Northwest?
      4. What percentage of the total population of the Pacific Northwest is engaged in Lumbering and Logging?
   C. Debate
      1. Are we wasting our forest or are we using the forest profitably?

V. Evaluation
   A. Class
      1. What was the extent of the interest and enjoyment in the different parts of the unit?

[7] This educational film is listed in the visual aids bibliography.

[8] This set of Kodachrome slides is listed in the visual aid bibliography. The educational films are also found in this bibliography.

[9] This Kit is listed in the bibliography called "Kits."

2. What are the class suggestions for betterment of the unit?
3. What were the most important single or group factors stressed by the students while studying the units?

B. Teacher

1. Determine the amount of interest and participation by observation.
2. Evaluate the individual and group projects by the teacher's own criteria.
3. Have weekly quiz on material covered each week. A final examination would be given at the end of the unit. These quizzes and the final examination can be objective, subjective or oral as the teacher desires.

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GEOGRAPHICAL PUBLICATIONS

Dorothy Childs Hogner. **Earthworms,** illustrated by Nils Hogner. Thomas Y. Crowell Co., New York, 1953. 51 pages. $2.00.

Earthworms—those wriggling, squirming bits of life that most curious boys and and some girls age 7-10 are interested in. The Hogners have given an excellent picture in words and illustrations of the life of the lowly earthworm. The description thruout the book is not only accurate and detailed but would arouse interest and encourage children to raise questions and promote discussion of new ideas and interests in living things.

The book describes where and how the earthworm lives, what it eats, how it hears, why it is the gardener's friend, how to watch it work, and gives directions for starting an earthworm farm—something that is needed if one has a duckbilled platypus to feed, since the platypus requires 25,000 earthworms a month.

Earthworms may well be used just for interest reading by the individual child or more profitably perhaps as source material or supplementary reading in the study of natural science. The large print vocabulary and concepts would place this book in the 3-5 grades level. It could be read independently by them, while the younger child would be interested in having it read to him with a dicussion of the written material and illustrations.

Earthworms may well be in any primary or elementary teacher's library who is interested in the teaching of natural science, soil and/or the physical phases of geography.

PAULINE SCHLECHTY

South Side School
Whiting, Indiana

Bruce D. Campbell. **Where the High Winds Blow,** Adventure in the Arctic with the Hudson's Bay Company. C. S. Hammond and Company, New York, 1952. Illustrated by Philip Bear. 220 pages.

Popular interest in the far north has had its effect on school geography texts. They are giving more space to the Arctic and filling it with less archaic material. The publishers of *Where the High Winds Blow* are to be commended for issuing a geographical reader based on first hand experience on the east shore of Hudson Bay. The author spent five years there as an apprentice trader in the thirties and describes his experiences with refreshing straightforwardness. The illustrator has, on the whole, done his work accurately, and certainly attractively.

Campbell did not write this book as a school reader. He published it in 1946 for general circulation, and it has now been rearranged with notes and exercises intended to make it suitable for the classroom. What are referred to as "Publisher's Notes" are scattered indiscriminately thru the text. In the opinion of the reviewer they do not add to the merit of the book, and increase the inaccuracies that critics of the earlier version pointed out. A list of Eskimo words on page 212 states that *innuk* is the Eskimo for "a person." It is confusing to find on page 210 that the word is *inuik,* which it certainly is not. The writer of such supplementary notes, an Ontario schoolmaster, further confuses the issue by introducing an extract on the origin of the Eskimos taken from an Encyclopedia, and certainly not the accepted explanation. Many of the exercises and questions included are purely factual, as for example "When was the Arctic Institute formed?" a fact which can be ascertained not from the text as written by Campbell, but from the Publisher's Note.

TREVOR LLOYD

Dartmouth College

S. N. Namowitz, D. B. Stone. **Earth Science, The World We Live In.** D. Van Nostrand Company, Inc., New York, 1953. 438 pages, about 197 pictures, 31 maps, 230 sketches. $3.96.

Five units make up the content of this high school textbook. The major unit, The Earth and Its Land Forms, is covered in 16 chapters of 200 pages; The Earth and the Universe in 6 chapters of more than 60 pages, The Earth and Its Atmosphere in 12 chapters of 115 pages, The Earth and Its Oceans and The Earth and Its Climates in 3 chapters of more than 40 pages.

The Preface states that the content is "aimed to develop *real* understanding of the processes and concepts with which earth science deals . . . to present the basic ideas in sufficient detail . . . and to make them meaningful."

Each unit is introduced with a full page photograph appropriate to the theme. The facing page of text defines the unit, introduces terms, raises questions and stimulates interest by suggesting outcomes. Thruout the book, terms are italicized and paragraphs numbered. Topic questions at the end of each chapter are numbered to correspond to paragraphs. Other learning aids and teaching materials at the close of chapters are: lists of terms and concepts entitled, "Have You Learned These?"; topic questions, general questions, suggested activities, topics, readings and lists of topographic sheets.

The book presents a wealth of detail. Almost every page has pictures or diagrams or both. The double columns with short paragraphs make for rapid reading. The content is orderly and logically developed. Specific places and events are named to illustrate content. Sometimes details omit a general term such as the Great Rift Valley and yet many lakes within the Rift are listed.

The phonetic device for pronunciation seems hardly appropriate for high school students. Some examples are: erosion (uh-roh-zhun), alluvium (uh-loo-vee-um), and isobars (eye-suh-barz). This contrasts with reading lists that are largely of college level.

Some statements in the text are open to question. Others would be changed because of recent developments in science.

The Teacher's Guide gives helpful suggestions along with simple experiments and lists of visual aids available.

Any student who successfully masters the content of this volume in the year will have acquired the equivalent of the offerings in some college courses. The alert teacher will also find it possible to add numerous applications and examples of ways people are affected by the forces of earth science.

M. MELVINA SVEC

State University Teachers College
Oswego, New York

Olive Garnett. **Exploring the World.** Part One, 152 pages. Price 85 cents, and **Globe and Map.** Part Two, 55 pages. Price 45 cents. Book Three of The Discovery Books. Basil Blackwell, Oxford, 1953.

It is apparent that the author of these books correctly assumes that all children are at heart explorers. She also feels that when children have reached the mental age of ten years they are ready for world orientation. To achieve this she takes them on journeys, primarily with the earlier and better-known explorers—Marco Polo, Dias, Columbus, Vasco da Gama, Cabot, Cabral, Balboa and Magellan. To give the child a feeling of reality, excerpts from original records have been woven into the accounts. A chronological order is maintained so that knowledge of the world unfolds gradually as it did for the explorers.

Exploring the world mentally requires the use of globes and maps. For this a grasp

of basic map-techniques is needed. These techniques are presented in *Globe and Map*. A separate book was provided for this purpose so that the continuity of the stories in *Exploring the World* would not be interrupted.

Good? Yes! Suitable for a ten-year-old? Yes, except that a child raised in "geographically illiterate" United States may encounter trouble with some of the map techniques. Eye-appeal? Fair. The reviewer regrets that he feels constrained not to comment favorably on the reproduction of some of the pictures.

HERBERT H. GROSS

Concordia Teachers College
River Forest, Illinois

Malcolm Davies. **A Geographic Gadgeteer.** Baltimore City Board of Education, 1951. vii and 117 pages.

Every teacher who has struggled with a class in beginning geography in high school or even the freshman year in college knows that most of the text books and reference books do not explain adequately the basic physical properties of the earth and its relationship to our solar system. Most of these books assume that these features have been covered in earlier school grades, but most teachers, even college teachers, know that such an assumption usually is in error. At last we have something that is specifically designed to help solve this common problem.

This book confines itself to the basic physical and planetary relationships of the earth. The approach is that of simple examples of proof, experiments that can be performed by students and instructors and easy mathematical formulas that are interestingly designed to stimulate the imagination of high school students. The use and need of mathematics could provide an excellent opportunity to correlate the two subject matter fields in a way that would benefit both. These formulas, however, are not difficult enough to bother most teachers.

At the end of the preface of the book the author states, "This book aims to supply the need for an interesting, new outlook concerning the essentials of geography required for further geographic work." He has succeeded in this aim so well that every secondary teacher of basic geography should benefit by owning a copy of this little book. Indeed, many elementary teachers and college teachers could well put it to good use.

Northern Illinois State Teachers College VORIS KING
De Kalb

World Guide. Rand McNally Company, Box 7600, Chicago 80, 1953. ix and 726 pages. $6.95.

The material contained in the *World Guide* is adopted from Columbia University's 1952 publication, *Columbia Lippincott Gazetteer of the World*. The Rand McNally Company, in preparing the *World Guide*, included what that company assumed to be the most significant locations. In general the selection of places was well done and the discussion accompanying each appropriate.

In concise, but in interesting and lucid form for this type of book, the editors present an unexpected amount of information dealing with geography, history and economics arranged in ready-reference form, easily available to the reader in some 700 pages. The major sub-divisions of the *World Guide* are the continents. Each country is then considered within its appropriate continental region. In the case of the United States, the Soviet Union, Canada and French West Africa, the major political subdivisions are given attention. Important places within each country follow the general discussion of the country or, in the special cases, the major subdivisions thereof. In the discussion of each

state in the United States there is surprisingly clear, but short, topical inclusion of topography and climate, agriculture, resources, industries, education and history. The regional portion of the organization is particularly competent for Asia. The use of the term Southwest Asia circumvents confusion brought about by foreign and domestic concepts of the Near East and Middle East. An index, aides to pronunciation, glossary of geographical and historical names and sources for population data are valuable to the reader.

In *some* instances statistical data are not the latest available. For example, recent population estimates for Indonesia, even though perhaps subject to error, would be more helpful than the official (apparently 1930) pre World War II census data used. Many of the pictoral illustrations are excellent but of doubtful value in a book of this type. While a few worthwhile maps of large cities are included, the book would have been enhanced by simple, regional maps.

The faults of the volume are far surpassed by the many good features including quality typography and paper. This reference book should be on the desk of every teacher from the elementary school thru the graduate college for it is as indispensable as a dictionary and an atlas.

Fresno State College C. F. COLE

Samuel H. Ordway, Jr. **Resources and the American Dream.** The Ronald Press Company, New York, 1953. vii and 55 pages. **$2.00.**

A study of the never-ending flow of literature on the broad subject of conservations reveals that the neo-Malthusians are arrayed against the optimistic Cornucopians. Industrial production in the United States and the use of raw materials have increased faster than the increase of population. It is the expanding consumption of raw materials to satisfy the increasing wants of a growing population that has caused many people to express their alarm in respect to adequate supplies of foods, fibers and industrial materials in the next 25 or 50 years.

But there is a resourcefulness among the scientific and economic leaders which many believe will solve each shortage as it comes. It is expected that science and technology will find a solution to each resource problem as it arises. With this kind of faith in the future resources may be regarded as more or less inexhaustible.

Mr. Ordway, the author of this little book, calls attention to what he calls the theory of the limit of growth. He does not intend that this theory means stagnation or retrogression but that the rate of growth may be diminished in the future. This may result from the reduction or exhaustion of important resources but it may mean also that many people may come to accept the simple life and cease to strive for more material things, which support and maintain an expanding economy. The energy of an enterprising system which thrives on expansion perhaps can be directed to maintaining a more reasonable economic life.

Ohio State University
Columbus GUY-HAROLD SMITH

India and Her Neighbors. Neighbors of India Series No. 1 (Map)

Countries Around Indian Ocean. Neighbors of India Series No. 2 (Map) 32 x 42. Edited by G. P. Blave. Swastik Geographical Publishing Bureau, Swadeshi Mills Estate, Girgaum, Bombay 4, India.

It was indeed a pleasure to have a look at the above two maps. The Survey of India had long been the only map-making agency in India and had been responsible

for bringing out some of the finest topo-sheets in the world. Map printing did not extend much beyond this Governmental body and commercial maps that were made by publishing companies were often inaccurate and old fashioned. From the above series one gets the impression that considerable improvement is taking place in India in this regard, and private concerns have come out with extremely valuable modern maps. Room for further improvement is there, particularly in the quality of paper, printing and color; nevertheless, Mr. Blave and the publishers deserve our congratulations on having done an excellent job.

On the first map on India much useful information has been supplied, particularly on transportation, urban, economic and commercial geography and on the new political set up according to India's new constitution. The second map will be of considerable value to students of political and economic geography as it depicts, by a series of maps, the strategic importance of the countries around the Indian Ocean. A good deal of data is given on the trade, commerce, shipping and air routes and on the major cities of this area of increasing international importance.

Both the maps are handy, nicely folded and bound. We welcome and recommend these publications and hope they will prove to be a business success as well.

Nagpur University
Nagpur, India

SITANSHU MOOKERJEE

Griffith Taylor. **Geography in the Twentieth Century.** Philosophical Library, New York, 1953. **$8.75.**

Revised edition. The large demand for this book of limited appeal is an indication of the interest in the philosophy of geography. Three chapters have been added, namely, "The Sociological Aspects of Geography" by J. W. Watson; "Cartography" by W. W. Williams; and "The Geographical Interpretation of Air Photography" by F. Walker.

F. Walker. **Geography from the Air.** E. P. Dutton and Co., New York, 1953. 111 pages, 96 plates. **$7.50.**

Geography from the Air is a very detailed presentation of selected areas in the British Isles showing how aerial photos can be effectively used in geographic study and research. The author has selected very good examples of photographs, all taken by the Royal Air Force, to illustrate the various features that are of value in geographic study.

The material treated includes the study and interpretation of geological formations, erosion, land features and coastal development; human geography, primarily settlement patterns; and economic conditions and functions of the settlements. As might be expected from the use of aerial photos, the physical landscape is treated in a much larger extent than the cultural features; however, the settlement patterns section is well illustrated and discussed. The section on economic conditions is quite short and might have had more emphasis.

Geography from the Air would appeal to those who are planning the use of aerial photos in future studies and to those who are interested in detailed information on the British Isles. As there is a minimum amount of introduction to the use of aerial photos, the text would be more meaningful and usable to students having had elementary work in photo-interpretation. The author is aware of the advantages of stereoscopic pairs of photos, but because of limitations in production, only a few examples are included.

One handicap of the text is the arrangement of the photo plates in groups of sixteen. As the text is completely written about the individual pictures, it entails a

constant referring back and forth from text to illustration, and the latter not always treated in numerical order.

VAN H. ENGLISH

Dartmouth College

Seerley Reid and Anita Carpenter. **A Directory of 2660 16MM Film Libraries.** Office of Education Bulletin 1953, No. 7. 172 pages. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. $.50.

This directory is a state-by-state and city-by-city list of sources from which 16mm films can be borrowed or rented. It includes libraries which handle entertainment films and those which handle instructional films. Listed are libraries which have only one film and libraries which have thousands of films. The directory includes also commercial dealers, colleges and universities, city and State school systems, public libraries, industrial companies and trade associations, labor unions, civic groups, religious institutions and Government agencies.

A Directory of 2660 16mm Film Libraries will be helpful to teachers, school administrators and librarians who use or may wish to use motion pictures in their educational and informational programs.

Heinrich Hassmann. **Oil in the Soviet Union—History, Geography, Problems.** Translated by Alfred M. Leeston. Foreword by E. DeGolyer. Princeton University Press, Princeton, 1953, xvi and 173 pages.

Dr. Hassmann's treatise on oil in the Soviet Union constitutes a valuable reference volume for the serious student of Soviet affairs, to be used with "World Geography of Petroleum" and Shimkin's "Minerals: a Key to Soviet power." It presents a brief but most useful review of the general background of the Soviet oil industry as part of the Communist planned economy; a survey of the development of the industry since its beginnings in the 1860's to the present; and an interesting detailed description of all the oil producing regions of the USSR. The value of these three sections of the book lies in making accessible within the covers of one volume information that cannot easily be found without long and detailed search thru the extensive literature devoted to the petroleum industry.

The last section of the book appears to be the most original part of it: it deals with the relationship between oil demand and oil production in the USSR, and the future prospects of the oil industry there. The author emphasizes the close correlation between steel supply, availability of trained technicians, expansion of synthetic production facilities in the USSR and in the European satellites, and development of transportation on the one hand and the amount of oil production on the other. His final warning of the interest in the Near Eastern oil fields displayed by the Soviet Union has been emphasized by increased difficulties in that critically important oil region.

The translation is eminently readable, and the translator was successful in bringing many issues up to date in his footnotes. The volume is illustrated by a series of clear and useful maps.

University of Michigan
Ann Arbor

GEORGE KISH

GEOGRAPHICAL MATERIALS

Elinor O'Brien. **The Land and People of Ireland.** J. B. Lippincott Co., Philadelphia and New York, 1953. x and 115 pages with index and photographs. $2.75.

Dorothy Childs Hogner. **Earthworms.** Thomas Y. Crowell Co., New York, 1953. 51 pages with index and illustrations. $2.00.

Hans Pettersson. **Westward Ho with the Albatross.** E. P. Dutton, New York, 1953. 218 pages. $4.00.

Atlas of Pacific Northwest: Resources and Development. Oregon State University, Corvallis, 1953. vii and 118 pages with 72 plates. $1.75.

Geography in the Twentieth Century. Edited by Griffith Taylor. Philosophical Library, New York, 1953. xi and 661 pages with glossary, index and illustrations. $8.75.

Gatland and Kunesch. **Space Travel: An Illustrated Survey of its Problems and Prospects.** Philosophical Library, New York, 1953. x and 205 pages with bibliography, index and illustrations. $4.75.

Annual Coal and Non-metallic Mineral Report for 1952. Department of Industrial Relations, State of Ohio. 182 pages with maps.

Sir John Hunt. **The Conquest of Everest.** E. P. Dutton Co., New York, 1953. xx and 300 pages with 48 photographs, six maps and drawings and index. $6.00.

Namowitz and Stone. **Earth Science—The World We Live In.** D. Van Nostrand Company, New York, 1953, viii and 438 pages with illustrations and index. $3.96.

C. S. Alexander. **The Marine and Stream Terraces of the Capitola-Watsonville Area.** University of California Press, Berkeley 4, 1953. 40 pages with maps and photographs. $.75.

Whalen and Schmitt. **Living and Working Together in the United States and in the World.** Noble and Noble Publishers, New York, 1953. vii and 220 pages with illustrations and index.

D. W. Malcolm. **Sukumaland: an African People and Their Country.** Oxford University Press, New York, 1953. xv and 224 pages with maps, illustrations and index.

Heinrich Harrer. **Seven Years in Tibet.** E. P. Dutton, New York, 1954. ix and 314 pages with 40 photographs. $5.00.

Fairfield Osborn. **The Limits of the Earth.** Little, Brown and Co., Boston, 1953. x and 238 pages with bibliography and reading list. $3.50.

A. E. Smailes. **The Geography of Towns.** Hutchinson's University Library, London, 1953. 166 pages with maps and index. $2.40.

G. R. Crone. **Maps and Their Makers.** Hutchinson's University Library, London, 1954. xiv and 181 pages with index. $2.40.

Citizenship Education. Eleanor W. Thompson, ed. Annual Proceedings of the Middle States Council for the Social Studies, Vol. 50, 1953. 124 pages with index.

William Edward Leuchtenburg. **Flood Control Politics: the Connecticut River Valley Problem, 1927-1950.** Harvard University Press, Cambridge, 1953. vii and 339 pages with map, illustrations, bibliography and index. $5.00.

George R. Stewart. **The Opening of the California Trail.** University of California Press, Berkeley, 1953. viii and 115 pages with maps and 14 photos. $3.75.

Bedrich Hrozny. **Ancient History of Western Asia, India and Crete.** Philosophical Library. New York, 1953. xv and 260 pages with maps, index and illustrations. $12.00.

O. Garnett. **Globe and Map,** Book Three, Part Two: "The Discovery Books." Basil Blackwell, 49 Broad Street, Oxford, 1953. vii and 55 pages with glossary, maps and diagrams, illustrations and index. 3/-.

O. Garnett. **Exploring the World,** Book Three, Part One: "The Discovery Books." Basil Blackwell, 49 Broad Street, Oxford, 1953. vii and 152 pages with illustrations, maps and diagrams, glossary and index. 5/9.

Lemert and Harrelson. **North Carolina Geography.** Harlow Publishing Corp., Oklahoma City, 1954. x and 190 pages with illustrations, maps and charts, appendices, glossary and index.

Namowitz. **Tests for Earth Science, The World We Live In.** D. Van Nostrand Co., Inc., New York, 1953. vi and 42 pages with diagrams. $.60.

The Port of Seattle, Washington. Port Series No. 36 (Rev. 1952) Government Printing Office, Washington 25, D.C. ix and 219 pages with maps and illustrations. $1.75.

Katharine E. Wilkie. **Will Clark, Boy in Buckskins.** Bobbs-Merrill Co., Indianapolis, 1953. 192 pages with illustrations. $1.75.

Jack Bechdolt. **Oliver Becomes a Weatherman.** Julian Messner Co., New York, 1953. 63 pages with illustrations. $1.60.

Eleanor Clymer. **Make Way for Water.** Julian Messner Co., New York, 1953. 63 pages with illustrations. $1.60.

Helen D. Olds. **Sara's Lucky Harvest.** Julian Messner Co., New York, 1953. 63 pages with illustrations. $1.60.

Rand McNally Road Atlas. Rand McNally Co., Chicago, 1954. 112 pages. $1.50.

This We Believe About Education. A Statement Concerning Education in America. National Association of Manufacturers, New York, 1954. 32 pages.

Peter Hood. **How The Earth Is Made.** Oxford University Press, New York, 1954. 64 pages with illustrations. $2.50.

Virginia S. Eifert. **Three Rivers South: A Story of Young Abe Lincoln.** Dodd, Mead & Co., New York, 1953. x and 176 pages with illustrations. $2.95.

Hammond's Global-Geography Atlas. Hammond Publishing Co., Maplewood, New Jersey, 1954. 48 pages. $.75.

Philips' Pictorial Atlas of the World, Showing How and Where People Live. George Philip and Son Ltd., London, 1953. 24 pages with maps and illustrations. $.75. Copies may be secured by writing to C. S. Hammond Co., Maplewood, New Jersey.

EDITORIAL NOTES AND NEWS

The American Museum of Natural History has recently announced publication of three booklets in their "Man and Nature Series." They are: "Story of the Landscape" by H. K. Svenson and Farida A. Wiley, "Indians of Montana" and "Indians of North America" both by Harry Tschopik, Jr. These publications may be obtained for a nominal fee by writing to the American Museum of Natural History, Central Park West at 79 Street, New York 24, N.Y.

According to a recent report, more people visited Chicago's Museum of Science and Industry during 1953 than bought tickets to professional baseball games played in that city.

Catalog of Free Teaching Aids is now available from Gordon S. Salsbury, P.O. Box 943, Riverside, California, for $1.25. Over two thousand items are listed including booklets, charts, maps, free filmstrips, posters and free teaching aids.

According to the Brazilian Bulletin published by the Brazilian Government Trade Bureau, the July, 1953 frosts killed 483 million coffee trees. The biting wind, which killed or damaged half a billion coffee trees, ruined many farmers financially. Many trees not killed outright by the frosts will take at least three years, with heavy expenditure, to return to their former healthy state.

The first Lathrop Memorial Award has been issued to Earl Joseph Senninger. This award is a memorial to Dr. Harry O. Lathrop for his outstanding contributions to the community, to the University and to the field of geography. It is available to a senior in the Department of Geography at the Illinois State Normal University. The selection is made by the staff of the Department of Geography on the basis of scholastic ability, good character, evidence of interest in teaching geography and financial need.

One of the ways teachers keep up to date on new material is to actually see them at exhibits. Pictures and word descriptions are useful but actually examining the materials first hand is superior. Geographers have and continue to appreciate the skill and the efforts involved by exhibitors in making personal examination possible

EXHIBITORS AT 1954 MEETING

A. J. Nystrom and Co.	Denoyer-Geppert Company	The George F. Cram Co., Inc.
Ginn and Company	The Macmillan Company	
John C. Winston Co.	C. S. Hammond and Co.	Iroquois Publishing Co., Inc.
Allyn and Bacon, Inc.	John W. Gunter, San Francisco 16, Calif.	Rand McNally and Company

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Do we have a geographic methodology for teaching effectively attitudes and problem-solving skills of geography?

Geographers should be especially interested in the recent release of two films by the Coronet Films, 45 E. South Water Street, Chicago 1, Illinois. One of these films is entitled *Western Germany: The Land and the People,* and its educational collaborator is Zoe A. Thralls. The other is *Western Europe: An Introduction;* its educational collaborator is Edith P. Parker.

If concepts and/or understandings and skills are important objectives of geography teaching, are we preparing tests which include these things or just scientific facts?

Anyone interested in offering a high school geography course or teachers of a recently established high school geography course or even those who have been teaching high school geography I believe would be interested in *Geography Bulletin,* Vol. 3, No. 3 of the New Kensington Senior High School Geography Club published under the supervision of the teacher and sponsor Miss Mary Viola Phillips.

If you are one of those who have personal magazine exchange relations with friends in Great Britain whereby they send you *Geography* and you send them THE JOURNAL OF GEOGRAPHY, you undoubtedly have enjoyed the many articles appearing in *Geography.* However, for those who do not get *Geography* regularly, permit me to call your attention to a splendid Geography in Education article written by Professor R. C. Honeybone, Head of the Department of Geography in the Institute of Education, University of London, entitled "Balance in Geography and Education" which appeared in the April, 1954 issue of *Geography.*

"Italy-1954" appeared in *Background,* a publication of the Public Service Division, Department of State. It may be secured for 15 cents from the U. S. Government Printing Office, Washington 25, D.C.

Adventures in Education, a booklet describing the study tours available overseas to American students and teachers who wish to combine travel with college credit, has been issued by Pan American World Airways. The booklet may be obtained by writing to Mr. Gardner, 28-19 Bridge Plaza North, Long Island City 1, New York.

"Iran—Between Two Worlds," a 16-millimeter sound motion picture of the nation located in one of the historical hot-spots of the globe, has just been released by Encyclopaedia Britannica Films. The film, available in black-and-white or color, is designed especially for school and discussion groups interested in geography, world history and current affairs. The address is Encyclopaedia Britannica Films, Inc., 1150 Wilmette Avenue, Wilmette, Illinois.

Are we teaching today because of the inspiration some teacher gave us or failed to give us?

Would not the classroom teaching of geography greatly benefit if persons writing their Master's Degree theses in Teacher's Colleges and Colleges of Education under the supervision of Geography Department staff members would concentrate their research on topics concerning *The Teaching of Geography?*

Have you examined *A Critical History of Children's Literature* written by Cornelia Meigs and others and published by the Macmillan Company?

THE JOURNAL OF GEOGRAPHY goes to more elementary and high schools in California than in any other state.

It is said that the Ohio River is unique in the United States in that it is the only stream in which barges carry tonnage from its source to its mouth.

The last of July the first shipment from the new Labrador iron mines was sent on its way to Philadelphia. This first shipment consisted of 20 thousand tons. The mines are located along the Labrador-Quebec boundary. It is expected that about 1½ million tons of ore will be produced this year. With completion of the St. Lawrence Seaway large ore carriers will be able to reach U. S. steel mills from ports on the Great Lakes. Annual production will then rise rapidly.

RECENTLY ELECTED FELLOWS OF NCGT

Any member in good standing for five consecutive years is designated as a Fellow of the National Council of Geography Teachers. The following people have become Fellows:

April 1953

Eleanor M. Gover

September 1953

Mildred Little
E. M. Scott

October 1953

Mary Margaret Kuzeppa
Asenath Burns
Mrs. Bernard F. McKenzie
John I. Stroup
Robert S. Weiner

November 1953

F. Douglas Hammond
Edward C. Whitley

December 1953

Robert G. Bowman
Alfred R. Butz
Arthur Carthew
Sister Celine, C.R.
Frances Chantz
Edward B. Espanshade
June S. Carroll
Thomas P. Field
Thelma Flavin
Edna M. Fleming
J. W. Kruisselbrink
Kenneth McMillen
Nora M. Pezzuti
Edward Coleson
W. F. Plankenhorn
Dominador Z. Rosell
Dick T. Shank
Agnes A. Silvany
Myron Starbird
Alfred Taylor, Jr.
Julian Yoder
Reece A. Jones

January 1954

Mrs. Austin Broun
Francis F. Buff
John E. Christensen
Hazel L. Harnsberger
Edwin J. Foscue
R. S. Funderburk
Harold M. Mayer
Minnie Power
Earl F. Quist
Martha W. Shackleford
L. E. Snyder

February 1954

Arthur W. Christopherson
Donald W. Duchek
Fred Foster
May B. Gilbert
Robert Leighton Carmin
Dena Favot
Robert A. Heil
Herman F. Otte
W. F. Scarborough
James A. Shear
Dorothea M. Kelley
Audrey M. Leddy
Joseph E. Van Riper
Gilbert F. White
Dorothy McClure Fraser
Jessie R. Turk
Rueben L. Parson
Carlton R. Schroeder
Bonnie Mae Smith

March 1954

Henry Heimonen
Lewis M. Alexander
Clare Anderson
Mary L. Griffith
Paul E. Kohli
Henrietta P. Mammel
Andrew D. Perejda
Merle C. Prunty
Henry Dizon Smith
William H. Wake

May 1954

John A. Bradley
Mae G. H. Breneman
J. Russell Edwards
Arthur M. Grove
Mario A. Jorden
Fritz Kramer
Ruth Sugarman
Don Edward Totten